

April 15, 2016

Mr. Kenneth Thiessen, R.G., C.E.G. Oregon Department of Environmental Quality 700 NE Multnomah Street, Suite 600 Portland, Oregon 97232

Re: Voluntary Agreements Progress Report – First Quarter 2016 Shore Terminals LLC Portland Facility Portland, Oregon ECSI No. 5130 – Shore Terminals 1189-31

Dear Mr. Thiessen:

This letter presents the quarterly progress report for the Shore Terminals LLC Portland Facility located at 9420 NW St. Helens Road in Portland, Oregon (the Facility). This letter is submitted in accordance with the Voluntary Agreement for Source Control Measures (SCM) and the former ExxonMobil Voluntary Cleanup Agreement No. ECVC-NWR-01015 (Voluntary Cleanup Agreement). Shore Terminals LLC (Shore Terminals) began performing actions under these agreements on October 13, 2009 and December 22, 2011, respectively. This progress report includes the following for the first quarter of 2016:

- Actions performed under the Voluntary Cleanup Program (VCP) Agreements;
- Actions scheduled for the next quarter;
- Data generated; and
- Problems experienced and resolution.

FIRST QUARTER 2016 ACTIONS PERFORMED UNDER THE VCP AGREEMENTS

- Gauged monitoring wells AC-6, KMW17, KMW32, W-15, and loading rack monitoring wells AC-8, AC-9, AC-10, and KMW13 for the potential presence of separate-phase petroleum hydrocarbons (SPH) on a monthly basis:
- Conducted operation and maintenance of the air sparging/soil vapor extraction (AS/SVE) system;
- Submitted the Fourth Quarter 2015 Progress Report on January 15, 2016;
- Submitted the Second Semi-Annual 2015 Groundwater Monitoring Report on February 22, 2016; and
- Conducted the first semi-annual 2016 groundwater monitoring event in March 2016.

ACTIONS SCHEDULED FOR THE NEXT QUARTER

- Evaluate the operation and system pressures of the air sparge system to determine if the operating pressure should be reduced.
- Gauge liquid levels in monitoring wells AC-6, KMW17, KMW32, W-15, and loading rack monitoring wells AC-8, AC-9 and AC-10 at least monthly to evaluate the potential presence of SPH.

SAMPLING, TEST RESULTS, AND ANY OTHER DATA GENERATED BY SHORE TERMINALS DURING THE FIRST QUARTER 2016

- The first semi-annual 2016 groundwater monitoring event was completed from March 14 to March 17, 2015.
 These data will be included in the First Semi-Annual 2016 Groundwater Monitoring Report scheduled for submittal to DEQ in August 2016.
- An SPH sheen (less than 0.01-foot thickness) was observed at wells MW38, MW39, and MW43 during the
 first semi-annual 2016 groundwater monitoring event. These wells will be monitored on a monthly basis and
 the data will be included in the First Semi-Annual 2016 Groundwater Monitoring Report.
- System operational data were collected from the AS/SVE. These data will be included in the First Semi-Annual 2016 Groundwater Monitoring Report.
- Measureable SPH was observed in wells AC-6, AC-9, KMW17 during one or more of the gauging events.
 The results for SPH monitoring and recovery will be reported in the First Semi-Annual 2016 Groundwater Monitoring Report.

PROBLEMS EXPERIENCED AND RESOLUTION

On March 10, 2016, Apex was notified by the terminal manager that air bubbles were observed at the saturated ground surface in the vicinity of the air sparge curtain. It was determined that the air bubbles were the result of short-circuiting of the air sparge system. As a result of the short-circuiting, the AS/SVE system was shut-down on March 14, 2016; DEQ was notified of the system status on March 22, 2016. In an email dated April 8, 2016, DEQ confirmed that the remediation systems should remain inactive until the second semi-annual 2016 groundwater monitoring results are reviewed to determine if continued operation of the AS/SVE system is required.

The groundwater extraction (GWE) system remains off due to due to iron fouling.

If you have any questions regarding this progress report, please do not hesitate to contact either of the undersigned at (503) 924-4704.

Sincerely,

Ian Maguire, P.E. Senior Project Engineer Amanda L. Spencer, R.G., P.E Principal Hydrogeologist

CC:

Ms. Victoria Wark, NuStar Energy, L.P. (electronic deliverable)

Mr. Steve Kober, Shore Terminals LLC (electronic deliverable)

Ms. Eva DeMaria, Environmental Protection Agency (electronic deliverable)

Mr. Sean Sheldrake, Environmental Protection Agency (electronic deliverable)